

wherein for [general] formula A: [wherein] R_1 is mono or dihalogenated acyl group, aroyl group selected from the formulae of Tables 1 and 2 [(Table 1)], alkyloxy-carbonyl group or aryloxy-carbonyl group selected from the formulae of Table 2 [(Table 2)]; [and] R_3 is hydrogen or halogenated group selected from the formulae of Tables 1 and 2; [and] R_2 is hydrogen or acetyl groups; [wherein] R_4 is PhCO or Me_3COCO or $[\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)\text{CH}=(\text{CH}_3)\text{CO}]$ $\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)\text{CO}$. [R_3 is a halogenated group (Tables 1 and 2)];

for [general] formula B: [wherein] R_1 is mono or dihalogenated acyl group or aroyl group selected from the formulae of Table 1, [(Table 1)], alkyloxy-carbonyl group or aryloxy-carbonyl group selected from the formulae of Table 2 [(Table 2)]; [and] R_2 is hydrogen or acetyl group [and] ; R_5 is selected from the formulae of Table 3 [any group from Table 3] [.,]; R_6 is H or Me;

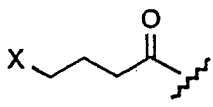
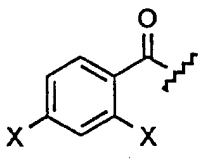
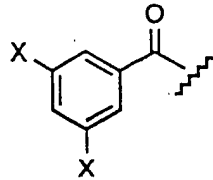
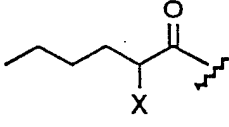
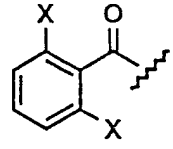
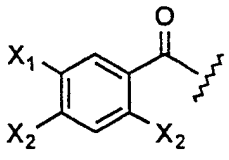
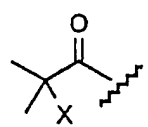
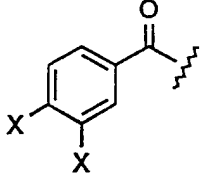
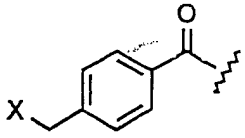
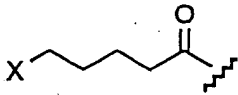
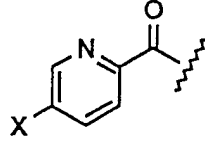
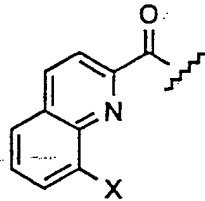
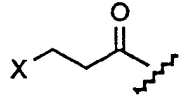
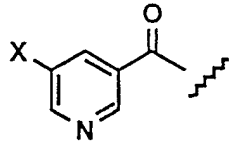
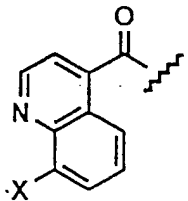
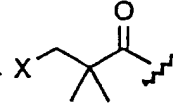
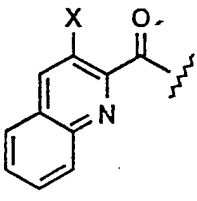
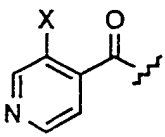
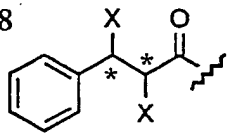
and wherein groups of Tables 1, 2 and 3 are selected from:

Table 1 Structures of Halogenated Acyl and Aroyl Groups

Group 1		Group 9		Group 17	
Group 2		Group 10		Group 18	
Group 3		Group 11		Group 19	
Group 4		Group 12		Group 20	
Group 5		Group 13		Group 21	
Group 6		Group 14			
Group 7		Group 15			
Group 8		Group 16			

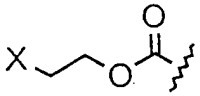
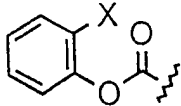
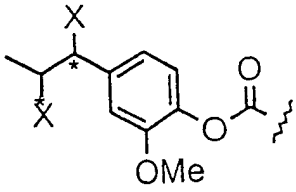
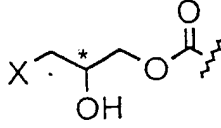
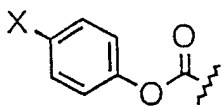
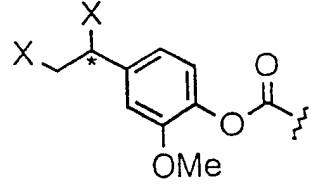
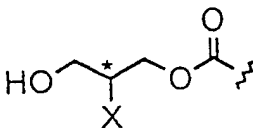
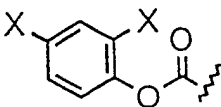
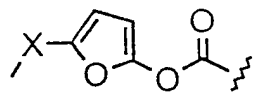
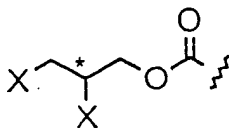
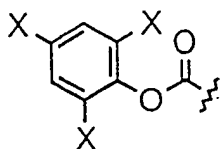
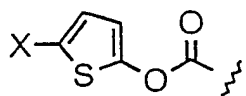
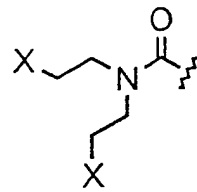
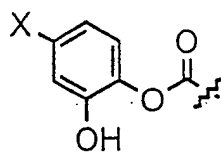
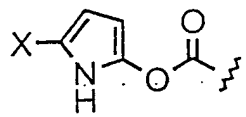
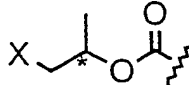
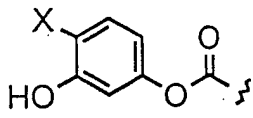
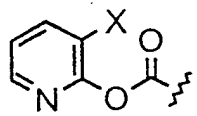
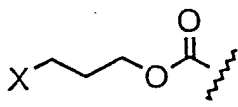
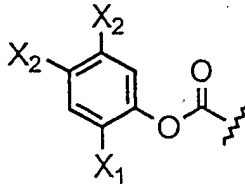
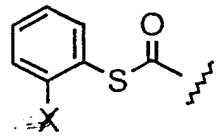
X: halogen (F or Cl or Br or I)

Table 1 (Contd)

Group 22		Group 29		Group 35	
Group 23		Group 30		Group 36	
Group 24		Group 31		Group 37	
Group 25		Group 32		Group 38	
Group 26		Group 33		Group 39	
Group 27		Group 34		Group 40	
Group 28					

X: halogen (F or Cl or Br or I)
X: one type of halogen
X: other type of halogen

Table 2 Structures of Halogenated Alkyloxy- and Aryloxy- Carbonyl Groups

Group 41		Group 48		Group 55	
Group 42		Group 49		Group 56	
Group 43		Group 50		Group 57	
Group 44		Group 51		Group 58	
Group 45		Group 52		Group 59	
Group 46		Group 53		Group 60	
Group 47		Group 54		Group 61	

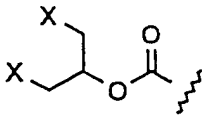
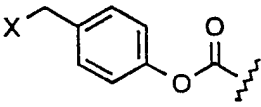
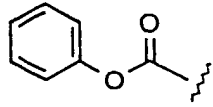
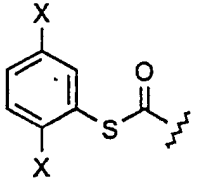
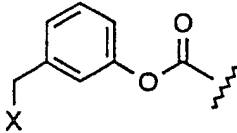
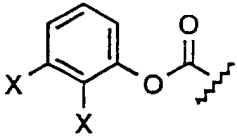
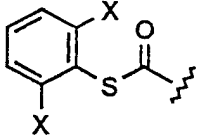
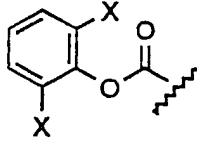
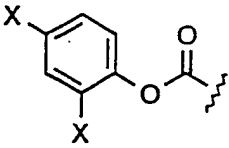
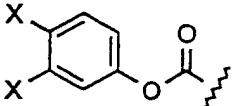
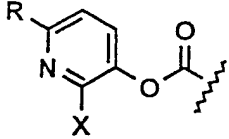
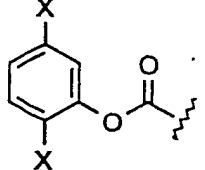
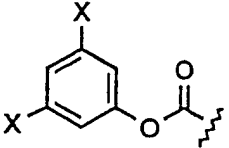
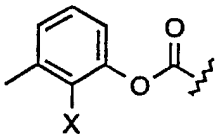
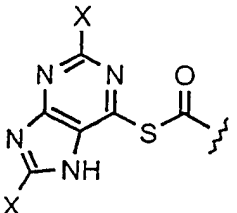
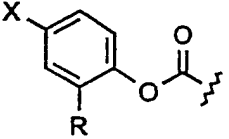
X: halogen (F or Cl or Br or I)
X₁: one type of halogen
X₂: other type of halogen

Table 2 (Contd)

Group 62		Group 68		Group 74	
Group 63		Group 69		Group 75	
Group 64		Group 70		Group 76	
Group 65		Group 71		Group 77	
Group 66		Group 72		Group 78	
Group 67		Group 73		Group 79	

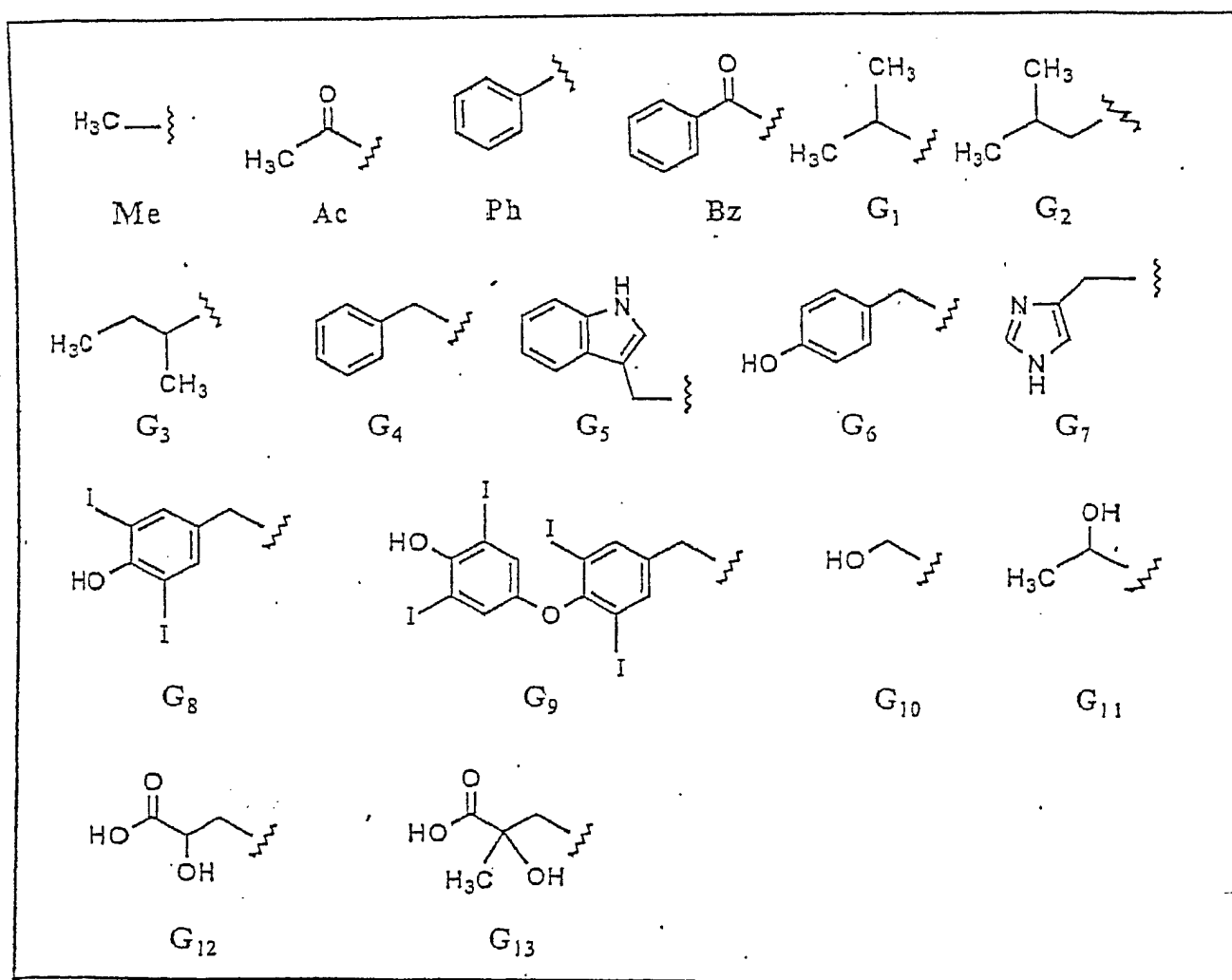
X: halogen (F or Cl or Br or I)
X₁: one type of halogen
X₂: other type of halogen

Table 2 (Contd)

Group 80		Group 86		Group 91	
Group 81		Group 87		Group 92	
Group 82		Group 88		Group 93	
Group 83		Group 89		Group 94	
Group 84		Group 90		Group 95	
Group 85					

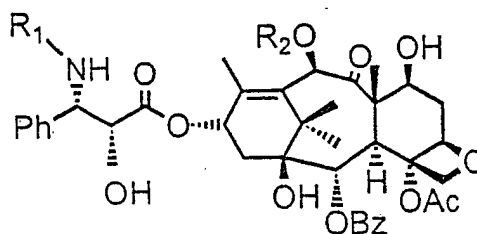
X: halogen (F or Cl or Br or I)

Table 3 Group Structures of Amino Acids and Their Codes Used in This Patent



2. (once amended) A compound of claim 1 of the formula:

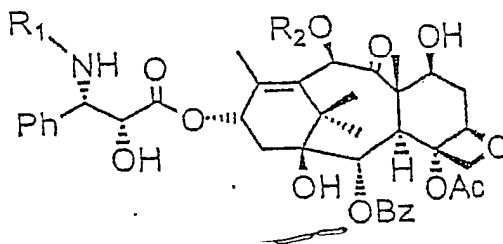
TYPE I



wherein R₁ is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)];
and R₂ is H or Ac [;].

3. (once amended) A compound of claim 1 of the formula:

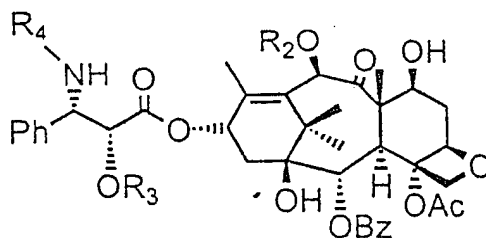
TYPE II



wherein R₁ is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)];
R₂ is H or Ac [;].

4. (once amended) A compound of claim 1 of the formula:

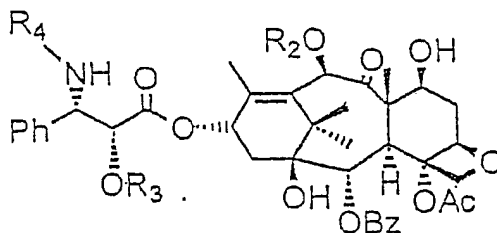
TYPE III



wherein R_3 is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)]; and R_2 is H or Ac, and R_4 is PhCO or Me_3COCO or $\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)\text{CO}$ [;].

5. (once amended) A compound of claim 1 of the formula:

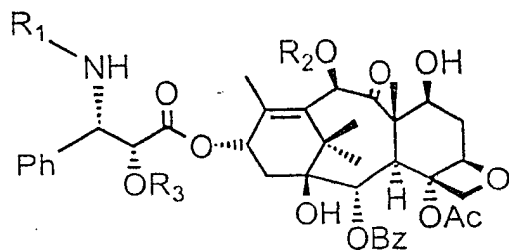
TYPE IV



wherein R_3 is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)], R_2 is Ac or H, and R_4 is PhCO or Me_3COCO or $\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)\text{CO}$ [;].

6. (once amended) A compound of claim 1 of the formula:

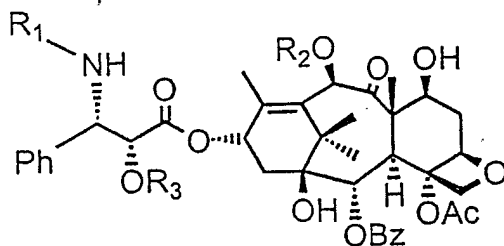
TYPE V



wherein R₁ is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)]; R₂ is H or Ac; and
R₃ is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)]
[;].

7. (once amended) A compound of claim 1 of the formula:

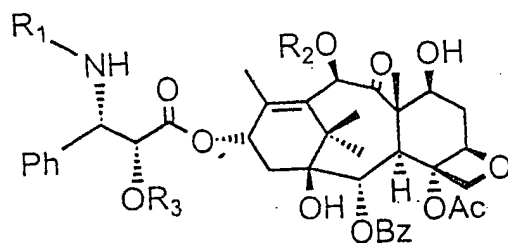
TYPE VI



wherein R₁ is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)]; R₂ is H or Ac; and
R₃ is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)] [;]

8. (once amended) A compound of claim 1 of the formula:

TYPE VII



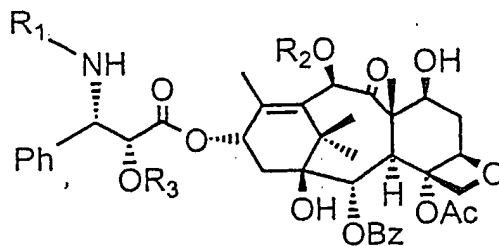
wherein R₁ is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)];

R₂ is H or Ac; and

R₃ is a group selected from the formulae of Table 1, groups 1 to 40 [(groups 1 to 40)] [;].

9. (once amended) A compound of claim 1 of the formula:

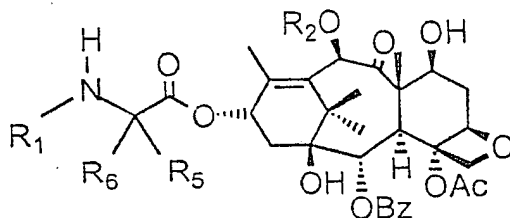
TYPE VIII



wherein R₁ is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)];

R₃ is a group selected from the formulae of Table 2, groups 41 to 95 [(groups 41 to 95)]
[;].

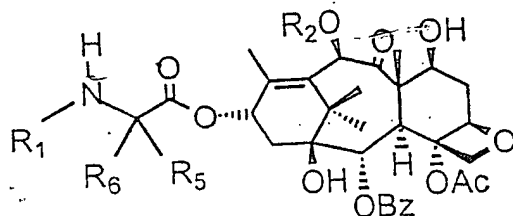
TYPE IX



R₅ is H or is selected from the formulae of Table 3 [or Me or G₁ or G₂ or G₃ or G₄ or G₅ or G₆ or G₇ or G₈ or G₉ or G₁₀ or G₁₁ or G₁₂ or G₁₃];

R₆ is H and [only in the case] when R₅ is G₁₀ from Table 3, R₆ is H or Me [;].

TYPE X



wherein R₁ is a group selected from the formulae of Table 2 groups 55 to 95 [(groups 55 to 95)]; R₂ is H or Ac;

R₅ is H or is selected from the formulae of Table 3 [or Me or G₁ or G₂ or G₃ or G₄ or G₅ or G₆ or G₇ or G₈ or G₉ or G₁₀ or G₁₁ or G₁₂ or G₁₃];

R₆ is H and [only in the case] when R₅ is G₁₀ from the Table 3 [the group] R₆ is H or Me [;].

Kindly add the following new claims:

34. A method for the production of a compound of claim 2 comprising reacting N-deacylated cephalomannine or paclitaxel with halogenated or dihalogenated acyl halogenides selected from the formulae of table 1, groups 1-40, of claim 1.

35. The method of claim 34 wherein the reaction is carried out in the presence of aminobases at temperatures effective to make any amount of said compound.

36. A method for the production of a compound of claim 3 comprising a reaction selected from,

(a) N-deacylated cephalomannine or paclitaxel, halogenated phenols selected from the formulae of table 2, groups 41-95, of claim 1 and triphosgene, and

(b) N-deacylated cephalomannine or paclitaxel and halogenated formates having formulae selected from groups in table 2, groups 41-95, of claim 1.

37. The method of claim 36 where the reaction of part (a) is carried out with a non-separated and non purified product of N-deacylated cephalomannine or paclitaxel and halogenated phenols with triphosgene under an inert atmosphere at temperatures effective to make any amount of said compound.

38. A method for the production of a compound of claim 4 comprising reacting paclitaxel, cephalomannine or Taxotere® with halogenated or dihalogenated acyl halogenides selected from the formulae of table 1, groups 1-40, of claim 1.

39. The method of claim 38 wherein the reaction is conducted in the presence of aminobases under temperatures effective to produce any amount of said compound.

40. A method for the production of a compound of claim 5 comprising,

(a) reacting paclitaxel, cephalomannine or taxotere® with halogenated alkyl or aryl formate selected from the formulae of table 2, groups 41 to 95, of claim 1, or

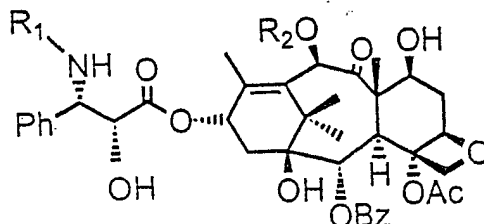
(b) reacting paclitaxel, cephalomannine or Taxotere® with the product of the reaction between halogenated phenols selected from the formulae of table 2, groups 41 to 95, of claim 1 and triphosgene.

41. The method of claim 4 wherein the reaction of part (b) is carried out with a non-separated and non-purified product obtained from said halogenated phenols and triphosgene under an inert atmosphere at temperatures effective to make any amount of said compound.

42. A method for the production of a compound of claim 6 comprising

(a) reacting compounds of type 1

TYPE I

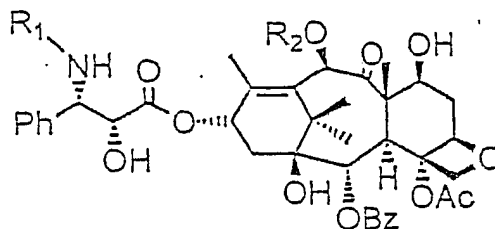


with halogenated alkyl or aryl formate selected from the formulae of table 2, groups 41 to 95, of claim 1, or

(b) reacting compounds of said type 1 with products obtained between halogenated phenols selected from the formulae of table 2, groups 41 to 95, of claim 1, and triphosgene, at temperatures effective to make any amount of said compound.

43. A method for the production of a compound of claim 7 comprising reacting compounds of type II

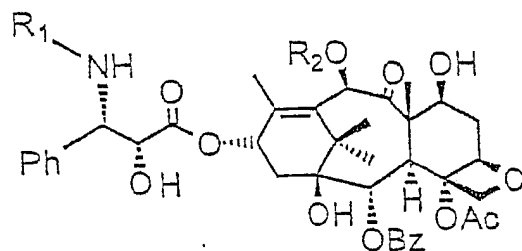
TYPE II



with halogenated or dihalogenated acyl halogenides selected from the formulae of table 1, groups 1 to 40, of claim 1, in the presence of aminobases at temperatures effective to make any amount of said compounds.

44. A method for the production of a compound of claim 8 comprising reacting a compound of type I

TYPE I

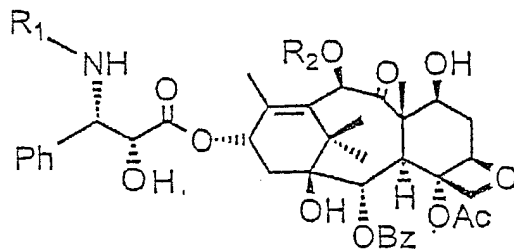


with halogenated or dihalogenated acyl halogenides selected from the formulae of table 1, groups 1 to 40, of claim 1 in the presence of aminobases at temperatures effective to make any amount of said compound.

45. A method for the production of a compound of claim 9 comprising

(a) reacting compounds of type II

TYPE II



with halogenated alkyl or aryl formate selected from the formulae of table 2, groups 41 to 95, of claim 1, or

(b) reacting compounds of said type II with the products of the reaction between halogenated phenols selected from the formulae of table 2, groups 41 to 95, of claim 1.

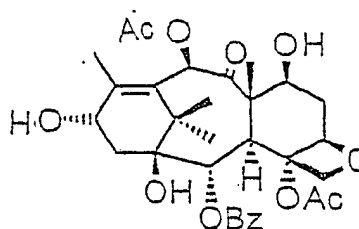
46. The method of claim 45 part (b) wherein the reaction is carried out under an inert atmosphere and at temperatures effective to make any amount of said compound.

47. A method for the production of a compound of claim 10 comprising

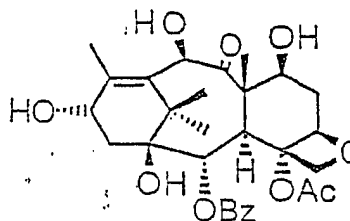
(a) reacting N-substituted acyl halogenides selected from the formulae of table 1, groups 1 to 40, of claim 1, α -amino acids when the group $RCH(NH_2)COOH$ where R is selected from the formulae of table 3, claim 1, with

BACCATIN III

or



10-DEACETYL
BACCATIN III



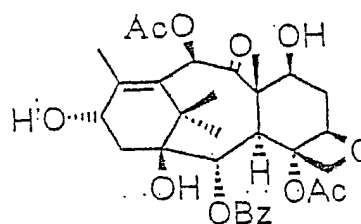
in the presence of aminobases at a temperature effective to make any amount of said compound; or

(b) reacting halogenated or dihalogenated acyl halogenides selected from the formulae of table 1, groups 1-40, of claim 1 with esterified said α -aminoacids selected from the formulae of table 3, claim 1, or with baccatin III or 10-deacetyl-baccatin III.

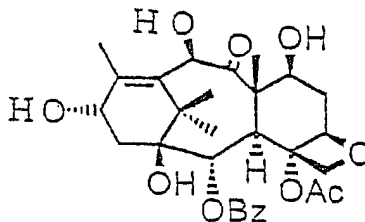
48. A method for the production of a compound of claim 11 comprising

(a) reacting N-substituted halogenides selected from the formulae of table 2, groups 41 to 95, of claim 1 with α -amino acids, (when the group $RCH(NH_2)COOH$, where R is selected from the formulae of Table 3) claim 1, with,

BACCATIN III



10-DEACETYL
BACCATIN III



in the presence of aminobases at temperatures effective to make any amount of said compound , or

(b) reacting halogenated phenols selected from the formulae of table 2, groups 41-95, of claim 1 and esterified said α -amino acids selected from the formulae of table 3, claim 1, with baccatin III or 10-deacetyl-baccatin III.